

SYSTEM AND METHOD FOR THE DETECTION OF BRAIN IRON USING
MAGNETIC RESONANCE IMAGING

ABSTRACT OF THE DISCLOSURE

[0031] A method and system for detecting iron using magnetic resonance imaging (MRI) is provided. The method comprises generating a substantially high magnetic field strength within the MRI system, acquiring magnetic resonance (MR) images by a pulse sequence adapted to create a magnetic field map of the brain for use in enhancing brain iron deposits, and, characterizing regions of interest using the magnetic field map to detect statistically relevant quantities of brain iron deposits to indicate a given disease.